

Logical Framework Analysis

Do users in India, Kenya and Ghana react differently to problematic content?

Objectives of the Study:

The study seeks to meet the following objectives:

1. Check if misuse of social media platforms (through problematic content - incorrect, sensational, provocative, divisive, hateful, and misleading information) may cause different levels and kinds of harm (in the form of increasing polarisation, creating trust deficits, instigating negative reactions, promoting abusive behaviour, etc.) to different users, particularly new as well as to non-users.
2. Understand diverse perspectives of different users (difference in users' ethnographic, cultural and political scenarios, geographic location, demographic profile, economic condition experience, psychological and cognitive variables, extent and duration of exposure to the problematic content, etc.) towards problematic content.
3. Devise targeted factor-specific intervention plan to help users engage more critically or consciously, to avoid problematic experiences arising due to exposure to problematic content.

As highlighted in the Operation Strategy Note, to meet the aforementioned objectives, the study proposes a two-fold strategy of conducting (a) an impersonal user perspective study through a survey and (b) an in-person simulation exercise and laboratory study. While the first two objectives will be met by conducting an impersonal user perspective study through a survey, the last objective will be met by conducting an in-person simulation exercise and laboratory study. In order to implement the stated strategy, a Logical Framework Analysis (LFA) model has been prepared.

Logical Framework Analysis:

Each objective is broken down into different components and the parameters for achieving the chosen objectives have been identified. Based on the literature review and the findings of the previous studies, gaps have been analysed. This framework has provided for identification of key indicators for forming the questionnaire for both the impersonal user-perspective study (survey) as well as the in-person simulation exercise and laboratory study. The table below shows the LFA model:

S. No.	Components of Objective	Parameters for achieving components	Previous Studies Findings	Gap Analysis: Validation and Further Information Required	Key Indicators for Questionnaires
<i>Objective 1: Check if exposure to problematic content on social media causes harm to users</i>					
1.1	Exposure to problematic content on social media platforms.	<ul style="list-style-type: none"> ● Profile of people getting affected. ● Popular social media (SM) platforms used. ● Types of problematic content being exposed to. 	<ul style="list-style-type: none"> ● Classification of problematic content has been done as disinformation, fake news, unverified information, rumours, urban legend, spams, and trolls.¹ ● Popular different kinds of problematic content – incorrect, sensational, provocative, divisive, hateful, and misleading information. ● Messages can be classified under different categories - Alarmism², Culture³, Cure⁴, Nature & the 	<ul style="list-style-type: none"> ● Different user groups based on: location, age, gender, and education. ● Awareness and exposure to different kinds and classes of problematic content. ● Amount of usage of different social media platforms like Facebook, Twitter, LinkedIn and Instagram. 	<ul style="list-style-type: none"> ● User profiles – location (urban, peri-urban, & rural areas); age (millennials, genX, boomers); gender (males-females); and education (primary, secondary, graduation & post-graduation). ● Ability to distinguish between different classes of problematic content. ● Frequency of exposure to different kinds of problematic content. ● Usage of different SM platforms, in years (experience), and/or daily hours spent on them.

¹ London School of Economics: Disinfo Wars: a taxonomy of information warfare

² Message is alarmist when it refers to fear-invoking messages such as those with violent imagery, death or mass-killings.

³ Message is about culture when messages have religious connotations, celebrity or societal references.

⁴ Messages comes under cure-based when messages suggest remedies – alternative or mainstream – that make claims on curing people of the virus.

S. No.	Components of Objective	Parameters for achieving components	Previous Studies Findings	Gap Analysis: Validation and Further Information Required	Key Indicators for Questionnaires
			Environment ⁵ , Casualty ⁶ , Business & Economy ⁷ , Government ⁸ , and Doctored statistics ⁹ .		
1.2	Users' reaction/behaviour on exposure to problematic content on SM platforms.	<ul style="list-style-type: none"> ● The factors on which the fake news or problematic content is identified. ● First thought which comes to mind while encountering problematic content. ● Perception about the need for critical evaluation and conscious engagement of content consumed online. ● The action taken to exposure to different problematic content. ● Awareness and frequency 	<ul style="list-style-type: none"> ● The behaviour of individuals has been discussed and certain patterns like, repetitive encounter of a content makes people believe it to be true etc. are identified.¹⁰ ● Confirmation bias i.e., “the tendency to search for, interpret, favour, and recall information in a way that confirms or supports one's 	<ul style="list-style-type: none"> ● Types of effects on a person after exposure to problematic content. E.g., anger, fear, compassion etc. ● The general reaction to specific problematic contents. E.g., ignore, forward, like, share, share within friends or to a friend, report etc. ● The similarity of behaviour/ motivation between any set of users for any different or particular contents. ● Reaction pattern to different 	<ul style="list-style-type: none"> ● Different behavior to different problematic contents. ● General reactions to any problematic content like forwarding with or without application of mind, ignore etc. ● Impulses coming to mind e.g., such contents should be banned, why am I seeing this repetitively, such contents should be shared etc. ● How frequently users

⁵ Message is classified as nature when messages have references to animals and the environment.

⁶ Messages relating to deaths, illness of people in the pandemic, including graphic images of suffering (not including doctored statistics)

⁷ Messages relating to scams, panic-buying and target businesses with fake positive cases.

⁸ Messages have government announcements and advisories or refer to police, judiciary, political parties.

⁹ Messages that have exaggerated numbers of positive cases or death counts and fake advisories.

¹⁰ A Survey of Fake News: Fundamental Theories, Detection Methods, and Opportunities

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		<p>of reporting the problematic content on social media platforms.</p> <ul style="list-style-type: none"> ● Level of Awareness about the various techniques used by the sources of problematic content in order to achieve their objective. 	<p>prior beliefs or values” has been discussed.¹¹</p> <ul style="list-style-type: none"> ● Reaction of users on fake posts like ignorance, taking content at face value, investigation on content being was true or suspicious, and reason for reaction are provided.¹² ● Phases of information disorder, i.e., creation, reproduction and distribution, having three elements – agent, message and interpreter, have been identified. 	<p>contents will be known.</p> <ul style="list-style-type: none"> ● Check awareness on, engaging critically can save a person falling prey to hidden/actual agenda. ● Factors behind consumers accepting fake contents as truth have to be seen. E.g., citation of trusted source, shared by many users, designed in a formal way, unverifiable claim etc. 	<p>report problematic content, and type of content getting reported.</p> <ul style="list-style-type: none"> ● Factors which differentiate problematic content from other content. ● Opinion about which content should be engaged critically and should be cross checked. E.g., source of the post, relevance of the post, why is it being shared with me etc.
1.3	Users experiencing any harm arising out of exposure to	<ul style="list-style-type: none"> ● Awareness about existence of potential harm arising out of exposure to different problematic content on 	<ul style="list-style-type: none"> ● Factors which consumers consider for building trust on a particular news were checked on a likert 	<ul style="list-style-type: none"> ● Different kind of harms resulting from problematic content, directly and indirectly. ● The pattern of usage 	<ul style="list-style-type: none"> ● Awareness about possible harm to users from problematic content. ● Kind of possible harms to

¹¹ Ibid

¹² University of Washington: How people investigate — or don't — fake news on Twitter and Facebook

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	different problematic content	SM. <ul style="list-style-type: none"> ● Kinds of problematic content considered as harmful. ● Causes of harm arising from problematic content. ● Identification of kind of harms which are being caused by problematic content on SM on users. 	scale – grammar, sender, sources of information mentioned, availability of similar posts, position and timing of posts ¹³ <ul style="list-style-type: none"> ● Factors giving messages credibility based on age, use of official seals or popular personalities etc. are listed.¹⁴ ● Perspective on having an indicator of trustworthiness attached to content has been gauged – flashing stop light, number scale from 0-100, coloured graphic etc. Influence of these 	which leads to certain kind of harm. <ul style="list-style-type: none"> ● Overall experience of using different SM platforms with respect to problematic content. ● Which type of problematic content do more harm. ● The specific factors which need intervention will be deduced. ● Threat perception consumers with respect to the categories of misinformation needed to be found. 	different user groups. <ul style="list-style-type: none"> ● Emotional response or behavior triggered on exposure to different problematic content. ● Witnessed or suffered any offline harm due to problematic content on social media. ● Any significant change in their positions about social issues and the basis of that change. ● Explore the need of awareness generation and/or capacity building in dealing with problematic content.

¹³ Real or Fake? User Behavior and Attitudes Related to Determining the Veracity of Social Media Posts

¹⁴ University of Michigan: Content patterns in COVID-19 related digital misinformation in India

S. No.	Components of Objective	Parameters for achieving components	Previous Studies Findings	Gap Analysis: Validation and Further Information Required	Key Indicators for Questionnaires
			indicators was also checked. ¹⁵		
1.4	Level of harms due to exposure to problematic content.	<ul style="list-style-type: none"> ● Perception and experience of different problematic content varying degrees of harm to users. ● Perception about the severity of harm which can be done due to exposure to certain content. ● Fluctuation in level of harm during any big positive or negative event. E.g., Natural disaster, certain party winning elections, any religious celebration etc. 	<ul style="list-style-type: none"> ● Which kind of content generates more attraction and interaction, has been tested.¹⁶ ● The aim of sharing hostile rumours is ‘(1) coordinate the attention and action of the audience with the goal of mobilizing against the target group and (2) signal their willingness to engage in conflict escalation (i.e., helping push the collective over the tipping point for collective action). ● The spread of fake news and the aim 	<ul style="list-style-type: none"> ● Perception about level of harms accruing from different problematic content. ● Understanding the type of people getting more or less affected by a particular nature of content. 	<ul style="list-style-type: none"> ● Classification of level of harms into, less, severe, negligible, etc. from specific kinds of problematic contents. ● Perception about varying degree of harm from different problematic content. ● Likelihood of additional reaction or harm caused with respect to content related to big event.

¹⁵ Real or Fake? User Behavior and Attitudes Related to Determining the Veracity of Social Media Posts

¹⁶ Internet users engage more with phatic posts than with health misinformation on Facebook

S. No.	Components of Objective	Parameters for achieving components	Previous Studies Findings	Gap Analysis: Validation and Further Information Required	Key Indicators for Questionnaires
			<p>behind the same has been analysed in the study. It shows that some people do involve in cross checking and verifying or feel the need of verification of certain posts they come across but some do not.¹⁷</p>		
<i>Objective 2: Understand users' perspective towards problematic content</i>					
2.1	User perspective on problematic content on SM platforms	<ul style="list-style-type: none"> ● Shared and differed perspective toward particular content. ● Overall perception about the reliability of information received on SM platforms. ● The reasons for such perceptions on reliability. ● Overall perception about the action which should be taken on problematic 	<ul style="list-style-type: none"> ● In a survey 36% people only read forwarded messages, 25% in rural areas forwarded them. 15% never believed information received via messaging apps. While 8% of always believed the information. ● 43% trusted news channels, 15% trusted 	<ul style="list-style-type: none"> ● Check if perspective is pre-determined or it does change with different levels and kind of exposure. ● The perception among different users about the reliability of information based on different platforms and sources will be known. ● The general perception about the kinds of 	<ul style="list-style-type: none"> ● The sources from which users access content, and their existing/subsequent beliefs must be known. ● Effect on perspective if something is being shared by trusted source. ● The effect of repeated exposure on a particular perspective toward a particular content. ● Any change in

¹⁷ Id.

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		<p>content. (What should be done when encountered?)</p> <ul style="list-style-type: none"> ● Perception about the mode of information like, video audio, text graphics etc., in influencing reliability of the consumer information. 	<p>WhatsApp.</p> <ul style="list-style-type: none"> ● People of less than 35 age group use online modes more, for getting news. ● Impact on trust by content creator (state, non-state and public actors), in influencing perceptions and behaviour is available. ● A person's subjective confidence in his judgments is reliably greater than the objective ones.¹⁸ ● Individuals tends to believe the information for which they have pre-existing belief. They also tend to believe what others around them are believing. 	<p>problematic content among different user group will be understood.</p> <ul style="list-style-type: none"> ● Trust and reaction to different content based on personal beliefs and social/political orientation would be checked. 	<p>perspective due to some major event.</p> <ul style="list-style-type: none"> ● Overall perspective about different kinds of information” news, facts, opinion, historical claim, scientific claim etc.”

¹⁸ A Survey of Fake News: Fundamental Theories, Detection Methods, and Opportunities.

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			<ul style="list-style-type: none"> ● It has been found that misinformation spikes during disasters, times of war, breaking news developments etc. ● It was shown that some information which fits in particular narrative leads to polarized community having similar consumption pattern.¹⁹ ● Social norms, political orientation and individual belief system decided the acceptance of an information.²⁰ ● Reliance on social cues or alternative markers like number of comments, images and the sender of the 		

¹⁹ Proceedings of the National Academy of sciences of the USA: The spreading of misinformation online

²⁰ Audience Motivations for Sharing Dis- and Misinformation: A Comparative Study in Five Sub-Saharan African Countries

S. No.	Components of Objective	Parameters for achieving components	Previous Studies Findings	Gap Analysis: Validation and Further Information Required	Key Indicators for Questionnaires
			messages to access news. ²¹		
<i>Objective 3: Devise targeted factor-specific intervention plan to help users avoid problematic experiences due to problematic content</i>					
3.1	Different aids which can be provided to users in order to make them engage more critically and consciously with online content	<ul style="list-style-type: none"> ● Awareness about the process of spreading fake news or other problematic content. ● Analysing the Verifiability of the content and the intent of consumer to verify the content. ● Different ways which are being followed or can be followed for critical engagement. ● Finding out the steps taken by users in order to get out of the harm they get into due to exposure to problematic content. 	<ul style="list-style-type: none"> ● Provide the points which lead to success of fake news and provide various steps which should be taken to identify and avoid the same.²² ● Most vulnerable groups were identified as below 20 years of age and above 50 years. ● Some different theories like “People tend to overestimate the likelihood of good things happening rather than bad things” are given.²³ 	<ul style="list-style-type: none"> ● Validate the suggestions proposed by studies to tackle the problematic content. ● The effectiveness and will to use tools for verification will be known. ● Various tools which are available online for fact checking etc. has to be found. 	<ul style="list-style-type: none"> ● How often do they come across posts which they feel should be verified. ● What steps do they take while coming across a suspected problematic content? ● Knowledge about verification tools. e.g., Reverse image search, fact checking websites etc. ● Difficulty in verifying a particular kind of post or a post on a particular platform. ● Understand user reaction/behaviour if any harm is

²¹ <https://www.statista.com/statistics/1026277/india-attributes-to-access-news-on-social-media/>

²² https://documents.trendmicro.com/assets/white_papers/wp-fake-news-machine-how-propagandists-abuse-the-internet.pdf

²³ <https://arxiv.org/pdf/1812.00315.pdf>

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		<ul style="list-style-type: none"> Awareness about the tools to identify problematic content. 			<p>already done, while realising later that it was false content.</p> <ul style="list-style-type: none"> The intent and will to use the tools for verification. Opinion about auto takedown of some problematic content.